

## **ARLINGTON PUBLIC SCHOOLS**

*In accordance with the provisions of the Massachusetts General laws, Chapter 30A, Section 20, notice is hereby given for the following meeting of the:*

**Arlington School Committee  
School Committee Special Meeting  
Monday, April 7, 2025  
5:45 PM**

*In Person:  
Arlington Public Schools District Office  
14 Mill Brook Drive  
2nd Floor, School Committee Room  
Arlington, MA 02476*

*Via Zoom:  
<https://us02web.zoom.us/j/86956181807>*

*5:45 p.m. Open Meeting (J. Morgan)*

*5:50 p.m. Discussion and Possible Vote - Ottoson Statement of Interest (J. Morgan)*

- *Copy of OMS - Capital Needs Assessment CNA Report*
- *Ottoson SOI - Letter for Approval - School Committee*
- *OMS SOI to SC\_SB*
- *April 7, 2025 SOI VOTE\_SELECT BOARD*

*5:55 p.m. Adjournment (J. Morgan)*

*The listings of matters are those reasonably anticipated by the Chair, which may be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law.*

*Stated times and time amounts, listed in parenthesis, are the estimated amount of time for that particular agenda item. Actual times may be shorter or longer depending on the time needed to fully explore the topic.*

*Submitted by Jane Morgan, Chair*

Massachusetts law requires all open session meetings of public bodies to be accessible to members of the public, including those with disabilities. If you need reasonable accommodations in order to participate in the meeting, contact the Administrative Assistant to the Arlington School Committee Liz Diggins at [ediggins@arlington.k12.ma.us](mailto:ediggins@arlington.k12.ma.us).



## Town of Arlington, Massachusetts

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### **Meeting Location - Hybrid**

#### **Summary:**

In Person:

Arlington Public Schools District Office  
14 Mill Brook Drive  
2nd Floor, School Committee Room  
Arlington, MA 02476

Via Zoom:

<https://us02web.zoom.us/j/86956181807>



**Town of Arlington, Massachusetts**

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**5:45 p.m. Open Meeting (J. Morgan)**



## Town of Arlington, Massachusetts

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### 5:50 p.m. Discussion and Possible Vote - Ottoson Statement of Interest (J. Morgan)

#### Summary:

- Copy of OMS - Capital Needs Assessment CNA Report
- Ottoson SOI - Letter for Approval - School Committee
- OMS SOI to SC\_SB
- April 7, 2025 SOI VOTE\_SELECT BOARD

#### ATTACHMENTS:

Type	File Name	Description
Document for Approval	Ottoson_SOI_-_Letter_for_Approval_-_School_Committee_(3).pdf	Ottoson SOI - Letter for Approval - School Committee (3)
Reference Material	Copy_of_OMS_-_Capital_Needs_Assessment_CNA_Report_(1).pdf	Copy of OMS - Capital Needs Assessment CNA Report (1)
Reference Material	OMS_SOI_to_SC_SB.pdf	OMS SOI to SC_SB
Reference Material	April_7__2025_SOI_VOTE__SELECT_BOARD_(1).pdf	April 7, 2025 SOI VOTE_SELECT BOARD (1)



# Arlington Public Schools

Education That Empowers

April 7, 2025

## Arlington School Committee MASSACHUSETTS 02476-4908

Resolved: Having convened in an open meeting on **Monday, April 7, 2025**, prior to the SOI submission closing date, the **School Committee of the Town of Arlington**, in accordance with its charter, by-laws, and ordinances, has voted to authorize the **Superintendent of Schools, Dr. Elizabeth Homan**, to submit to the Massachusetts School Building Authority the Statement of Interest Form dated April 11, 2025 **for the Ottoson Middle School located at 63 Acton Street, Arlington, MA 02476** which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future: replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements; and replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility; and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the Arlington Public Schools to filing an application for funding with the Massachusetts School Building Authority.

Sincerely,

Jane Morgan, Chair  
Arlington School Committee

It was a unanimous decision in the affirmative

Liz Exton	Yes	Laura Gitelson	Yes
Len Kardon	Yes	Jane Morgan	Yes
Kirsi Allison-Ampe	Yes	Paul Schlichtman	Yes
Jeff Thielman	Yes		(7-0-0)

A true record ATTEST:

By: \_\_\_\_\_

Juli Brazile, Town Clerk

# Capital Needs Assessment

## PRELIMINARY REPORT

Prepared for:



869 Massachusetts Avenue  
Arlington, MA 02476

**Ottoson Middle School**  
Arlington, MA

April 29, 2022



# Ottoson Middle School: Property Overview

**Total Buildings:** 1

**ON-SITE  
INSIGHT**   
A RECAP REAL ESTATE ADVISORS COMPANY

<u>Building Type</u>	<u># of Buildings</u>	<u>Approx. GSF</u>
Elevator	1	170,114
Walk-up	-	-
<b>Totals:</b>	<b>1</b>	<b>170,114</b>

**Occupancy:** Public Middle School

**Property/Development Age:** 25

**Year of Construction:** 1921

**Most Recent Rehab:** 1997

**City & State:** Arlington, MA

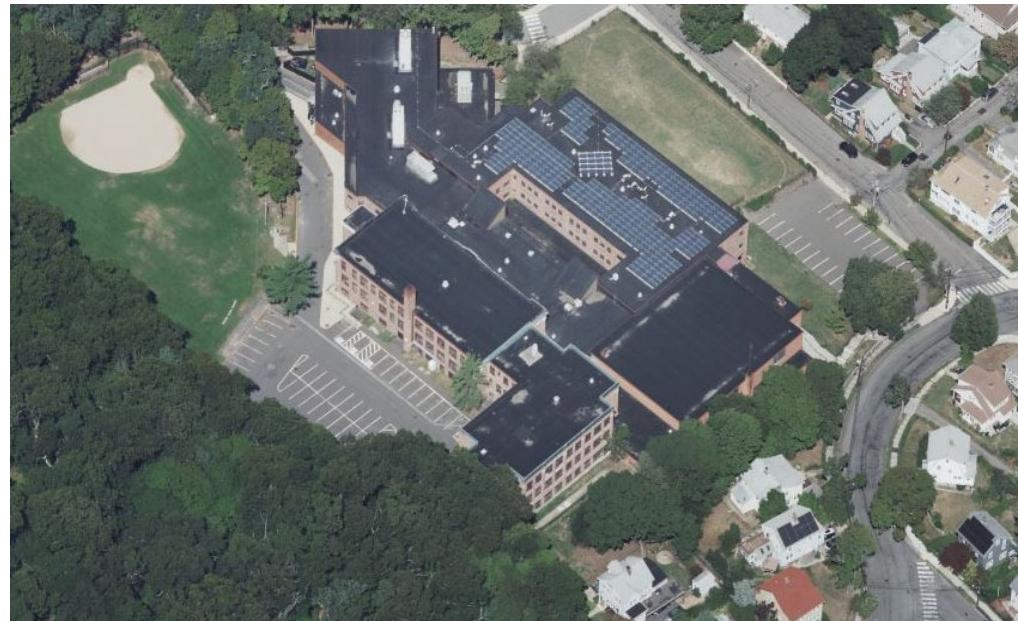
**Addresses:** 63 Acton Street

**OSI Project Number:** 22032

**Assessment Date:** April 19th, 2022

**Assessment Conditions:** High 40's, Sunny

**Assessor:** Matthew Chown



## **Property Description:**

Ottoson Middle School is a public middle school located in a predominantly residential neighborhood of Arlington, MA. The school serves students in grades seven and eight. The facility was originally constructed circa 1921 and underwent a major rehabilitation (including reported addition) circa 1997. The facility contains two gymnasiums (herein referred to as blue and wood gym), a library and media center, an array of classrooms and staff/administrative space, several common restrooms, hallways, and stairways.

## Ottoson Middle School

Arlington, MA

**Ottoson Middle School** is a public middle school located in a predominantly residential neighborhood of Arlington, MA. The school serves students in grades seven and eight. The facility was originally constructed circa 1921 and underwent a major rehabilitation (including reported addition) circa 1997. The facility contains two gymnasiums (herein referred to as blue and wood gym), a library and media center, an array of classrooms and staff/administrative space, several common restrooms, hallways, and stairways. Overall, the development is in fair to good condition. The interior spaces and various building systems are adequately appointed and maintained. That said, the property has substantive capital needs anticipated in the coming years; a number of systems and components are at or approaching the end of their useful lives. Anticipated near-term needs include asphalt pavement resurfacing, localized concrete flatwork repairs/replacement, localized retaining wall repairs, as-needed stormwater drainage improvements, upgrade/replacement of the building's HVAC pneumatic control system (i.e., conversion to a direct digital control system), older rooftop-mounted HVAC equipment replacement, brick and stone masonry cladding repairs/replacement, deteriorated exterior caulking replacement, EPDM roof assembly replacement, and interior renovation efforts (e.g., repainting, floor covering replacement, displaced ceiling tile replacement, as-needed bathroom fixture and accessory replacement, etc.).

Future capital actions are based on useful life expectations and assume continued effective maintenance and physical management. Costs for the twenty-year plan total \$12,929,830, or \$76.01 per gross square feet in current dollars (\$16,243,016, or \$95.48 per gross square feet in inflated dollars).

## Site Systems

The facility is located on a moderately sloped parcel with a pair of asphalt-paved parking lots (one at rear and northeast corner of development). For the purposes of this report, the front of the building is considered to be facing north. A recreational park is located towards the southwest corner of the facility and is reportedly the responsibility of the Town of Arlington, MA.

Concrete walkways and site steps facilitate pedestrian access throughout the site. A mix of stone and concrete block masonry retaining walls are present at steep elevation changes. Metal chain-link fencing is present along the perimeter of the north end recreational field as well as along portions of the east property limit. Pole-mounted light-emitting diode (LED) fixtures facilitate illumination along the roadways and parking areas. Additional site elements include landscaping comprised of lawn areas, trees, shrubs, and plantings, wood entry signage, as well as site distribution systems.

- 1. Costs for the development's site related elements total \$899,219 or \$5.29 per gross square feet in inflated dollars.**
2. The asphalt pavement appears to date to the 1997 rehabilitation. Deterioration in the form of cracking, depressions, and evidence of fatigue was observed within the asphalt. Costs to scarify and resurface the asphalt pavement are shown in Year 1. Future costs to carry out preventative maintenance repairs in the form of crack filling, sealcoating, and restriping are shown every five years starting in Year 6.
3. The concrete walkways, site steps, and landings vary in condition. Management reports concrete step replacement was carried out in recent years. Localized cracking and concrete spalls were observed within the steps, landings, and walkways. Periodic costs to carry out sectional concrete repairs/replacement (including as-needed refurbishment of metal railings/guardrails) are shown every eight years starting in Year 1.
4. Several displaced concrete block masonry units were observed within the front elevation retaining walls. Furthermore, localized mortar loss/deterioration was noted within the development's perimeter stone retaining walls. Periodic costs to carry out as-needed retaining wall repairs/replacement are shown every five years starting in Year 1. These costs also include pressure washing of the segmental block retaining walls present at the front of the development.
5. The development's metal chain-link fencing is in serviceable condition at the present time. Periodic costs to carry out sectional repairs/replacement are shown every five years starting in Year 2.
6. A dumpster enclosure comprised of metal chain-link fencing is located at the south end of the building (i.e., abutting food receiving area). Future replacement of the dumpster enclosure is shown in Years 5 and 20.
7. No problems/concerns were reported with regards to the pole-mounted LED fixtures. Future replacement of the LED fixtures is shown in Years 5 and 20, based on a fifteen-year expected useful service life.
8. Periodic costs to carry out as-needed landscaping repairs/upgrades including tree pruning efforts are shown every five years starting in Year 1.
9. Future replacement of the development's wood entry signage is shown in Year 5.
10. Based on discussions with management, the development is experiencing stormwater drainage issues at the present time. The full extent of these issues is unconfirmed. A place marker allowance to carry out as-needed repairs/improvements are shown in Year 1, pending a detailed review by a qualified design professional.

## Mechanical Room

The building's central mechanical room houses the heating generation equipment. A pair of Lochinvar natural gas-fired condensing boilers (800 MBH energy input each) facilitate hydronic heat generation for the building. A Smith cast-iron sectional boiler facilitates supplemental heating for the facility. Augmenting the boilers are Grundfos micro-VFD boiler water circulation pumps, a pair of base-mounted hydronic heat circulation pumps, as well as variable frequency drives governing hydronic heat circulation pump performance. Domestic hot water (DHW) generation for the building is facilitated via a Navien condensing boiler (150 MBH energy input) working in concert with an HTP indirect-fired domestic hot water (DHW) storage tank (80-gallon storage capacity). Augmenting this system are a pair of Grundfos micro-VFD circulation pumps.

- 11. Costs related to the development's boilers and boiler room systems total \$1,009,085 or \$5.93 per gross square feet in inflated dollars.**
12. The Lochinvar natural gas-fired condensing heating boilers are in good operating condition at the present time. No problems/concerns were reported during the site review. Future replacement of the boilers is shown in Year 12, based on a twenty-year expected useful service life. Future replacement of the Smith cast-iron sectional boiler is shown in Year 5 (assumed limited usage as boiler is utilized for supplemental heating).
13. The development features a pneumatic control system governing interior environment conditions. Based on discussions with management, the pneumatic control system is inefficient at the present time and several spaces are experiencing balancing issues (i.e., lack of heat versus remainder of building). An allowance to replace the pneumatic control system with a direct digital control (DDC) system is shown in Year 1, however a full detailed review by a qualified design professional is required to determine the full scope and cost(s) of the required replacement work. The existing pneumatic control actuators, air compressor, air dryer, and various peripherals are included as part of the replacement/upgrade work.
14. No problems/concerns were reported with regards to the heating and domestic hot water circulation pumps. Future replacement costs are shown based on pump age, observed conditions, and pump expected useful service lives. Replacement of the variable frequency drive controllers serving the hydronic heat circulation pumps is shown in Year 12.
15. No problems/concerns were reported with regards to the domestic hot water (DHW) generation system. Future replacement of the Navien DHW boiler is shown in Year 13, based on a twenty-year expected useful service life. Replacement of the indirect-fired DHW storage tank is shown in Year 8, based on a fifteen-year expected useful service life.
16. Based on discussions with management, underground fuel oil storage tanks are present at the development and were previously utilized as the heating source for the building's boilers. These tanks have reportedly been abandoned in place.

## **Building Mechanical and Electrical Systems**

Major building systems include the fire sprinkler system (equipped with a backflow preventer), distribution piping for domestic hot and cold water, hydronic heat, sanitary wastewater, and natural gas services, heating, ventilation and air conditioning (HVAC) services, electrical, fire detection, security, and elevators.

**17. Costs related to the development's mechanical and electrical systems total \$3,699,755 or \$21.75 per gross square feet in inflated dollars.**

18. The building is equipped with a wet sprinkler system (city pressure supply). This system also includes a backflow preventer, a device designed to keep stagnant sprinkler water from flowing back into the potable water system. The fire suppression system is shown being maintained and monitored during the plan's timeframe.
19. No systemic problems/concerns were reported with regards to the building's distribution piping systems (i.e., no issues with regards to pin hole leaks, pipe breakage, or back-ups reported). These distribution piping systems are shown being maintained and monitored during the plan's timeframe.
20. An array of packaged rooftop units (RTU's) facilitate space heating/cooling for various spaces. The RTU's vary in age and condition. Replacement costs are shown based on RTU age, observed conditions, and a normal expected useful service life of twenty-years.
21. Three split-system air conditioners facilitate space cooling for the computer rooms. The air conditioners are operating beyond the end of their normal expected useful service lives, and replacement costs are shown in Years 1 and 16.
22. Three ductless mini-split system air conditioners facilitate space cooling for various interior spaces. Replacement costs are shown based on air conditioner age, observed conditions, and a normal expected useful service life of fifteen-years.
23. Eight heating and ventilation units serve various interior spaces including the blue gymnasium and locker rooms. The H/V units appear to date to the 1997 rehabilitation. Costs for as-needed replacement of the H/V units are shown in Years 1-8.
24. Each classroom is equipped with a pneumatically-controlled ventilator that is equipped with a wet heat loop from the boiler plant. Management reports several of the ventilator dampers are problematic at the present time; the ventilators date to the 1997 rehabilitation. Replacement of the ventilators is shown in Year 1, concurrent with replacement/upgrade of the building's pneumatic control system.
25. A series of rooftop-mounted exhausters facilitate ventilation for the building. Periodic costs to carry out as-needed replacement of the exhausters are shown every five years starting in Year 1.
26. Periodic costs to carry out as-needed electrical system/component repairs/replacement are shown every five years starting in Year 1. It is recommended that periodic infrared thermographic inspections and analysis of utility connections, main switchboard, breaker panels, disconnect switches, etc. be carried out to identify potential 'hot spots' in the electrical equipment that may cause potentially hazardous situations or a major source of system inefficiency. These inspections are shown being handled out of operating accounts.

27. No problems or concerns were reported with regards to the security camera system (reportedly fully upgraded in recent years). Periodic costs for as-needed camera and component repairs/replacement are shown every five years starting in Year 3.
28. The building contains solar photovoltaic panels and inverters on the northern upper roof level. Based on discussions with management, the PV panels and inverters are not the responsibility of the development; subsequently no costs for these components are shown during the plan's timeframe.
29. The building contains a central fire alarm control panel monitoring hardwired end devices. No active trouble signals were illuminated during the site review. Future replacement of the fire alarm control panel including end devices is shown in Year 6.
30. The facility is equipped with a public address system for paging/announcements/instructions. Management reports 50% of the PA system is not in operation. Costs for a system upgrade/replacement are shown in Year 1 (including clock system, which is also problematic).
31. A video entry intercom system regulates visitor entry at the main entrance. Future replacement of the intercom system is shown in Year 15, based on a twenty-year expected useful service life.
32. A pair of hydraulic-type elevators facilitate vertical access within the building. The elevators were reportedly modernized circa 2021 and are maintained under the terms of a full service contract. Future costs to renovate the cab interiors and replace door operators are shown in Year 14. Future modernization of the elevators is not anticipated during the plan's timeframe. No problems/concerns were reported with regards to the vertical platform lift (recently replaced); the platform lift is shown being maintained and monitored during the plan's timeframe.

## **Building Architectural Systems**

The building predominantly contains flat roofs constructed utilizing a mechanically fastened Ethylene Propylene Diene Monomer (EPDM) roof assembly. The exterior walls are predominantly clad in brick and stone masonry; limited standing seam metal cladding is also present at select upper wall areas. Exterior caulking is installed along window and door perimeters as well as at masonry control joints. A mix of single and double leaf metal and fiberglass doors are present at main entries, emergency exits, and service spaces. A metal overhead door is present at the food receiving area. Automatic door operators are present at the main entrance and vestibule. Exterior windows are prefinished aluminum-framed fixed and operable models containing insulating glass units (IGU's). Building and soffit-mounted light fixtures facilitate illumination along the building perimeter. Interior spaces include hallways and stairways, classrooms, office/administrative spaces, a pair of gymnasiums, a cafeteria, restrooms, and a food preparation kitchen. Interior finishes/materials include a mix of suspended ceiling tile, painted wall and ceiling surfaces, vinyl composition tile (VCT), hardwood, epoxy, rubber flooring, and carpeting.

- 33. Costs related to the development's architectural systems total \$10,634,956 or \$62.52 per gross square feet in inflated dollars.**
34. Localized cracking and deteriorated cementitious parge coat were observed within the exposed portions of concrete foundation wall. Repairs to the concrete foundation walls are included as part of exterior wall rehabilitation work discussed below. No problems/concerns were reported with regards to the building's main structural framing systems. Isolated areas of apparent efflorescence/moisture staining were observed within the abandoned boiler spaces (i.e., underside of concrete ceilings within basement level) of the building. An allowance for future as-needed concrete repairs and waterproofing efforts are shown in Year 6.
35. An elevated concrete walkway is present at the cafeteria emergency egress. Exposed and corroded reinforcing steel as well as concrete spalls were observed on the underside of the walkway. Costs to carry out concrete repairs as well as addressing corroded reinforcing steel are shown in Year 1.
36. The exterior doorways appear to vary in age and condition (i.e., majority of doors appear to date to 1997 rehabilitation, select doors appear to predate rehabilitation). Replacement of the exterior doors is shown based on doorway age, observed conditions, and doorway expected useful service lives. Future replacement of the food receiving area metal overhead door is shown in Year 5. Future replacement of the automatic door operators is shown in Year 10.
37. Several areas of mortar loss, cracking, spalls/deterioration, exposed and corroded reinforcing steel were observed within the brick and stone cladding, particularly at the north facing elevation of the original building (i.e., exterior walls over roof level). Furthermore, several steel lintels present above window openings exhibit corrosion and deformation. Costs to carry out repairs in the form of repointing, crack repairs, localized brick and stone replacement, and repairs to deteriorated lintel are shown in Year 1. However, it is recommended that these areas of deteriorated be further reviewed by a building envelope professional to determine the full scope and costs of required repair/replacement work.
38. Cohesive/adhesive failures were observed within the exterior caulking. Replacement costs are shown in Years 1 and 16, based on a fifteen-year expected useful service life.
39. The exterior windows reportedly date to the 1997 rehabilitation and are reportedly in good operating condition at the present time. Isolated failed insulating glass units (IGU's) were noted during the site review and costs for localized replacement are shown in Years 1-15 (failure of an IGU is ultimately apparent when condensation forms between the glass panes). Future replacement of the exterior windows is shown in Year 16.
40. The majority of the exterior light fixtures appear to have been upgraded with light-emitting diode (LED) models in recent years. Future replacement of the building and soffit-mounted light fixtures is shown in Year 11.
41. Based on discussions with management, areas of active roof leakage are occurring through the EPDM roof assemblies. Several areas of pronounced water ponding were also noted during the site review. Furthermore, localized deteriorated

- seams as well as soft spots (i.e., potentially saturated insulation) were noted during the site review. Based on roof surface serial numbers, the majority of the EPDM roof assemblies date to the 1997 rehabilitation. Replacement of the EPDM roof assemblies is shown in Year 1, based on the roofs exceeding a normal expected useful service life of twenty-years.
42. Pronounced vegetation growth and evidence of poor drainage was noted at select canopies (i.e., northeast corner of building). Costs to replace these roof sections are included with the aforementioned EPDM roof assembly replacement work.
43. No problems/concerns were reported with regards to the metal access roof doorways and roof hatches. Future replacement costs are shown in Year 5.
44. Common hallway, main lobby, and stairway finishes include suspended ceiling tile, painted wall surfaces, vinyl composition tile (VCT), and rubber flooring (stairways). Periodic costs to carry out as-needed repainting efforts are shown throughout the plan's timeframe. Localized cracking/wear was observed within the VCT flooring. Replacement of the VCT flooring is shown in Years 1-5. Costs for as-needed replacement of the rubber flooring are shown every five years starting in Year 1. Future replacement of the suspended ceiling tile is shown in Year 15. Periodic costs to carry out as-needed replacement of the solid core wood interior passage doors are shown every five years starting in Year 1.
45. Approximately 70% of the interior light fixtures are light-emitting diode (LED) models. The remaining light fixtures are shown being converted/replaced out of operating accounts.
46. Classroom, library, cafeteria, as well as office/administration space finishes/materials include suspended ceiling tile, painted wall surfaces, vinyl composition tile (VCT), and broadloom carpeting (library and select offices). Costs for as-needed repainting efforts are shown throughout the plan's timeframe. Future replacement of the suspended ceiling tile is shown starting in Year 15. Replacement of the VCT flooring and carpeting is shown based on floor covering age, observed conditions, and floor covering expected useful service lives.
47. Periodic costs to carry out as-needed replacement of classroom cabinetry sets, projectors, furnishings, fixtures, equipment, etc. are shown annually starting in Year 1.
48. The building contains two gyms, one gymnasium contains wood flooring and the second gym contains rubberized flooring (i.e., blue gym). Several displaced suspended ceiling tiles were noted within the blue gymnasium and pose a potential overhead risk. Replacement of the suspended ceiling tile including carrying out insulation improvements is shown in Year 1. Replacement of the rubberized flooring present within the blue gym is shown in Year 5. Costs to refinish the wood gymnasium flooring are shown in Years 1 and 11 (including replacement of wood stage flooring in Year 1). Periodic costs to carry out as-needed gymnasium/stage equipment replacement are shown every five years starting in Year 1.
49. No problems/concerns were reported with regards to the cafeteria commercial-grade food preparation equipment. Periodic costs to carry out as-needed equipment replacement are shown every five years starting in Year 2.

50. Locker room and common restroom finishes/materials include suspended ceiling tile, painted ceiling surfaces (girl's locker room), painted wall surfaces, ceramic tile walls, as well as epoxy flooring. Costs for repainting efforts are shown over five year periods starting in Years 1 and 11 (including as-needed repairs to ceramic tile walls). Future replacement of the suspended ceiling tile is shown in Year 15. Costs to refurbish the epoxy flooring are shown in Years 1 and 11. Periodic costs for as-needed fixture, accessory, and equipment replacement are shown throughout the plan's timeframe.

**Additional Notes:**

1. The Physical Assessment of the property was conducted on April 19<sup>th</sup>, 2022. Additional information was provided to ON-SITE INSIGHT by site staff and others. OSI was represented on this assignment by Matthew Chown. We would like to thank site staff for their assistance.
2. Regular updates of this plan are recommended to ensure careful monitoring of major building systems and to adjust the program to accommodate unanticipated circumstances surrounding the buildings, operations, and/or occupants.
3. This report is delivered subject to the conditions on Appendix A, *Statement of Delivery*.



View of widespread pattern cracking and evidence of fatigue within asphalt-paved surface parking area as seen at rear of development



Additional view of pattern cracking and evidence of fatigue within asphalt pavement



View of northeast corner lower asphalt parking lot – note similar deterioration/age related wear



View of east end concrete site steps and metal railings – railings exhibit paint peeling/weathering



View of concrete deterioration within walkway as seen towards southeast corner of building



View of cast-in-place concrete retaining wall present towards northeast corner of building – note concrete spalls/deterioration



View of concrete segmental block masonry retaining walls as seen at north end of building – several displaced masonry units noted



View of development wood entry signage



View of metal chain-link dumpster enclosure as seen at food receiving area



View of Lochinvar natural gas-fired primary hydronic heating boilers



View of Smith cast-iron sectional supplemental heating boiler



View of natural gas-fired domestic hot water boiler and indirect-fired domestic hot water storage tank facilitating domestic hot water generation for facility



View of base-mounted hydronic heat circulation pumps – 20-horsepower rating each



View of hydronic heat circulation pump variable frequency drive controller



View of air compressor forming part of pneumatic control system governing interior environment conditions



View of main incoming water supply line for fire suppression system – note backflow preventer is in place



View of sample of split-system air conditioner (one of several) – unit in photograph serves computer room



View of packaged rooftop unit serving media center (one of several RTU's serving facility)



View of ductless mini-split system air conditioners serving media center



View of packaged rooftop HVAC unit serving cafeteria



View of typical classroom unit ventilator – several ventilators are reportedly problematic at the present time



View of solar photovoltaic array – reportedly not development responsibility



View of solar photovoltaic array inverter – reportedly not development responsibility



View of central fire alarm control panel monitoring hardwired end devices at building



View of elevator cab interiors – one of two hydraulic-type elevators serving development



View of elevator hydraulic power unit – both recently modernized per management



View of vertical platform lift – recently replaced



View of typical building architecture as seen at south elevation



View of cracking within exposed portion of concrete foundation wall – cementitious parge coat exhibits delaminations/wear



View of concrete spalls and exposed/corroded reinforcing steel as seen at underside of elevated concrete walkway present towards northwest corner of building



View of main entry doorway framing exhibiting corrosion/wear



View of double leaf hollow metal service doors exhibiting age related wear/weathering



View of localized deteriorated brick masonry units at window corner



View of localized mortar loss within brick masonry cladding



View of pronounced stone cladding deterioration as seen at north facing elevation of original building—also note exposed and corroded reinforcing steel



Additional view of corroded/deteriorated reinforcing steel within stone cladding



View of steel lintel exhibiting corrosion/deterioration  
as seen at north elevation of original building



View of brick masonry chimney –  
widespread mortar loss/deterioration noted



Exterior windows are prefinished aluminum-framed fixed and operable models containing insulating glass units (IGU's) – limited failed IGU's noted during assessment



View of deteriorated caulking (i.e., cohesive failures) as seen at window perimeter



Several areas of water ponding observed on EPDM roof surfaces



Additional view of water ponding on roof surfaces as seen at lower roof area



View of poorly adhered section of roof membrane



View of EPDM roof assembly conditions as seen at uppermost roof (i.e., original building)



View of widespread vegetation growth and evidence of poor drainage as seen at canopy roof located towards northeast corner of building



View of typical common hallway finishes – suspended ceiling tile, painted wall surfaces, and vinyl composition tile (VCT) flooring



View of typical common stairway finishes – note rubber landings and stair treads



View of typical classroom finishes – suspended ceiling tile, painted wall surfaces, and vinyl composition tile (VCT) flooring



Localized cracking/deterioration noted within VCT flooring



View of metal locker conditions



View teacher's lounge finishes - suspended ceiling tile, painted wall surfaces, and vinyl composition tile (VCT) flooring



View of typical common restroom finishes and fixtures – age related wear



View of typical locker area finishes and fixtures



View of main gym finishes – note wood flooring



View of blue gym finishes – note rubberized flooring – also note displaced suspended ceiling tiles and potential overhead risk



View of main gym stage flooring exhibiting age related wear



View of main gym bleachers –  
reportedly in serviceable condition



View of sample of office space finishes – suspended ceiling  
tile, painted wall surfaces, and broadloom carpeting



View of library finishes and furnishings – suspended ceiling  
tile, painted wall surfaces, and broadloom carpeting

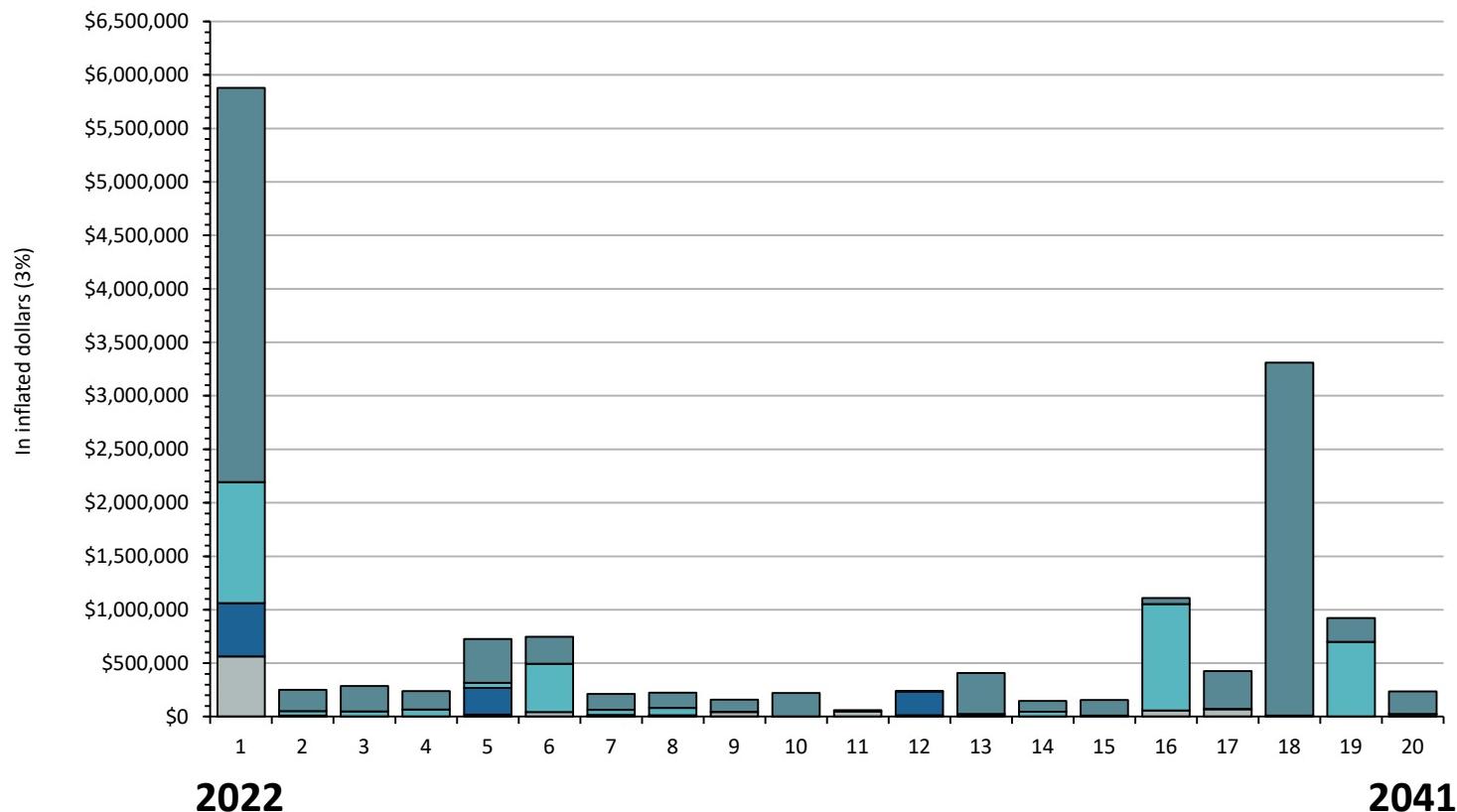


View of commercial kitchen finishes and equipment



View of cafeteria finishes – suspended ceiling tile, painted wall surfaces, and vinyl composition tile (VCT) flooring

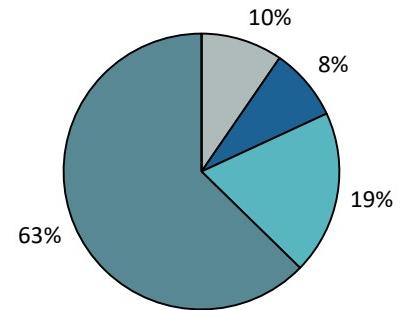
## Capital Needs Summary



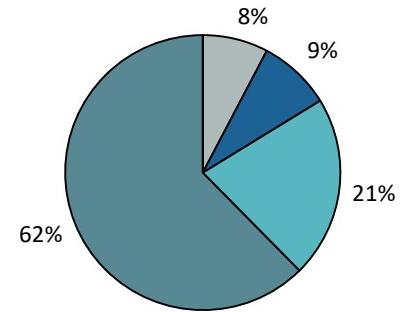
## Total Costs by Building System (inflated dollars)

	In Year 1	In Years 1-10	In Years 1-20
Site Systems	\$563,404 or \$3.31 /GSF	\$687,968 or \$4.04 /GSF	\$899,219 or \$5.29 /GSF
Mechanical Room	\$500,000 or \$2.94 /GSF	\$768,800 or \$4.52 /GSF	\$1,009,085 or \$5.93 /GSF
Building Mech. & Elec.	\$1,129,000 or \$6.64 /GSF	\$1,909,108 or \$11.22 /GSF	\$3,699,755 or \$21.75 /GSF
Building Architectural	\$3,687,299 or \$21.68 /GSF	\$5,584,297 or \$32.83 /GSF	\$10,634,956 or \$62.52 /GSF
<hr/>	<hr/>	<hr/>	<hr/>
In inflated dollars:	\$5,879,703 or \$34.56 /GSF	\$8,950,174 or \$52.61 /GSF	\$16,243,016 or \$95.48 /GSF
In current dollars:	\$5,879,703 or \$34.56 /GSF	\$8,560,446 or \$50.32 /GSF	\$12,929,830 or \$76.01 /GSF

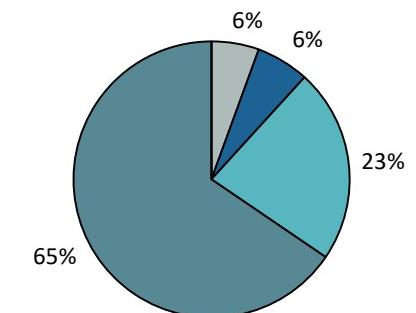
# Ottoson Middle School



## **Year One Distribution**



## Ten Year Distribution



## Twenty Year Distribution

# Capital Needs Summary

## Ottoson Middle School

Arlington, MA

OSI Ref: 22032

Property Age: 25 Years

Financing: Conventional

Number of Buildings: 1

Total Number of Units: 170114

Occupancy: Public Middle School

	<b>2022</b> Year 1	<b>2023</b> Year 2	<b>2024</b> Year 3	<b>2025</b> Year 4	<b>2026</b> Year 5	<b>2027</b> Year 6	<b>2028</b> Year 7	<b>2029</b> Year 8	<b>2030</b> Year 9	<b>2031</b> Year 10
<b>Site Systems</b>										
Surface Site Distribution Systems	\$463,404 \$100,000	\$9,418 \$0	\$0 \$0	\$0 \$0	\$18,008 \$0	\$43,043 \$0	\$10,918 \$0	\$0 \$0	\$43,177 \$0	\$0 \$0
Site Sub-Total	<b>\$563,404</b>	<b>\$9,418</b>	<b>\$0</b>	<b>\$0</b>	<b>\$18,008</b>	<b>\$43,043</b>	<b>\$10,918</b>	<b>\$0</b>	<b>\$43,177</b>	<b>\$0</b>
<b>Mechanical Room</b>										
Boilers	\$500,000	\$0	\$0	\$0	\$251,045	\$0	\$4,657	\$0	\$0	\$0
Boiler Room Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,098	\$0	\$0
Mechanical Sub-Total	<b>\$500,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$251,045</b>	<b>\$0</b>	<b>\$4,657</b>	<b>\$13,098</b>	<b>\$0</b>	<b>\$0</b>
<b>Building Mech. &amp; Electrical</b>										
Mechanical	\$1,071,500	\$42,745	\$44,027	\$67,203	\$46,709	\$48,110	\$49,553	\$63,339	\$1,900	\$1,957
Electrical	\$57,500	\$0	\$5,305	\$0	\$0	\$403,112	\$0	\$6,149	\$0	\$0
Elevators	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Mechanical & Electrical Sub-Total	<b>\$1,129,000</b>	<b>\$42,745</b>	<b>\$49,332</b>	<b>\$67,203</b>	<b>\$46,709</b>	<b>\$451,222</b>	<b>\$49,553</b>	<b>\$69,488</b>	<b>\$1,900</b>	<b>\$1,957</b>
<b>Building Architectural</b>										
Structural and Exterior	\$533,790	\$3,273	\$3,371	\$3,472	\$9,766	\$30,926	\$3,794	\$3,908	\$4,025	\$108,854
Roof Systems	\$2,502,750	\$0	\$0	\$0	\$8,441	\$0	\$0	\$0	\$0	\$0
Hallways	\$85,585	\$77,853	\$80,188	\$54,735	\$56,377	\$41,148	\$30,442	\$31,356	\$0	\$0
Stairways	\$45,845	\$0	\$0	\$0	\$0	\$53,147	\$0	\$0	\$0	\$0
Main Lobby	\$33,870	\$0	\$0	\$0	\$0	\$8,521	\$0	\$0	\$0	\$0
Classrooms/Library	\$80,314	\$77,573	\$119,845	\$82,298	\$84,767	\$93,106	\$89,929	\$92,627	\$95,406	\$98,268
Office/Administration	\$16,588	\$17,086	\$17,598	\$18,126	\$32,492	\$0	\$0	\$0	\$0	\$0
Gymnasiums	\$242,067	\$0	\$0	\$0	\$205,540	\$11,593	\$0	\$0	\$0	\$0
Cafeteria	\$87,000	\$10,300	\$2,652	\$0	\$0	\$0	\$11,941	\$0	\$0	\$0
Locker Rooms	\$35,235	\$0	\$0	\$0	\$0	\$2,898	\$0	\$0	\$0	\$0
Restrooms	\$24,256	\$13,083	\$13,476	\$13,880	\$14,296	\$12,172	\$12,538	\$12,914	\$13,301	\$13,700
Building Architectural Sub-Total	<b>\$3,687,299</b>	<b>\$199,167</b>	<b>\$237,130</b>	<b>\$172,510</b>	<b>\$411,679</b>	<b>\$253,512</b>	<b>\$148,643</b>	<b>\$140,804</b>	<b>\$112,732</b>	<b>\$220,822</b>
<b>Total Capital Costs</b>	<b>\$5,879,703</b>	<b>\$251,330</b>	<b>\$286,462</b>	<b>\$239,713</b>	<b>\$727,441</b>	<b>\$747,777</b>	<b>\$213,771</b>	<b>\$223,390</b>	<b>\$157,808</b>	<b>\$222,779</b>

## Ottoson Middle School

Costs on these two pages are aggregated by category from the Capital Needs worksheets which follow. Total capital costs on these two pages are carried forward to line F of the Replacement Reserve Analysis(es) that follow.

2032 Year 11	2033 Year 12	2034 Year 13	2035 Year 14	2036 Year 15	2037 Year 16	2038 Year 17	2039 Year 18	2040 Year 19	2041 Year 20	
\$49,899 \$0	\$12,657 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$57,847 \$0	\$69,368 \$0	\$0 \$0	\$0 \$0	\$21,480 \$0	<b>Site Systems</b> Surface Site Distribution Systems
<b>\$49,899</b>	<b>\$12,657</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$57,847</b>	<b>\$69,368</b>	<b>\$0</b>	<b>\$0</b>	<b>\$21,480</b>	Site Sub-Total
\$0 \$0	\$224,246 \$0	\$0 \$16,040	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	<b>Mechanical Room</b> Boilers Boiler Room Systems
<b>\$0</b>	<b>\$224,246</b>	<b>\$16,040</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	Mechanical Sub-Total
\$2,016 \$10,079 \$0	\$2,076 \$0 \$0	\$2,139 \$7,129 \$0	\$2,203 \$0 \$44,056	\$2,269 \$6,807 \$0	\$983,856 \$11,685 \$0	\$2,407 \$0 \$0	\$2,479 \$8,264 \$0	\$700,551 \$0 \$0	\$2,630 \$0 \$0	<b>Building Mech. &amp; Electrical</b> Mechanical Electrical Elevators
<b>\$12,095</b>	<b>\$2,076</b>	<b>\$9,267</b>	<b>\$46,259</b>	<b>\$9,076</b>	<b>\$995,541</b>	<b>\$2,407</b>	<b>\$10,744</b>	<b>\$700,551</b>	<b>\$2,630</b>	Mechanical & Electrical Sub-Total
\$19,053 \$0 \$47,702 \$61,612 \$9,878 \$31,887 \$5,161 \$123,034 \$12,095 \$47,353 \$26,128	\$4,398 \$0 \$35,291 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$17,583	\$4,530 \$0 \$36,350 \$0 \$0 \$0 \$0 \$0 \$0 \$18,110	\$4,666 \$0 \$41,671 \$46,272 \$18,051 \$27,501 \$5,639 \$0 \$0 \$0 \$18,653	\$4,806 \$0 \$98,221 \$71,425 \$11,451 \$82,363 \$39,530 \$15,580 \$0 \$18,976 \$39,237	\$2,975,531 \$0 \$85,121 \$0 \$0 \$92,624 \$15,600 \$16,068 \$0 \$3,895 \$16,359	\$0 \$0 \$87,674 \$0 \$0 \$87,379 \$16,550 \$16,550 \$0 \$0 \$16,849	\$0 \$0 \$46,901 \$0 \$0 \$90,000 \$17,047 \$17,047 \$0 \$0 \$17,355	\$0 \$0 \$0 \$0 \$0 \$92,700 \$0 \$0 \$0 \$0 \$17,876	\$0 \$0 \$0 \$0 \$0 \$95,481 \$0 \$0 \$0 \$0 \$0	<b>Building Architectural</b> Structural and Exterior Roof Systems Hallways Stairways Main Lobby Classrooms/Library Office/Administration Gymnasiums Cafeteria Locker Rooms Restrooms
<b>\$383,903</b>	<b>\$102,352</b>	<b>\$148,411</b>	<b>\$56,460</b>	<b>\$355,796</b>	<b>\$3,300,686</b>	<b>\$221,465</b>	<b>\$211,580</b>	<b>\$174,524</b>	<b>\$95,481</b>	Building Architectural Sub-Total
<b>\$445,897</b>	<b>\$341,331</b>	<b>\$173,719</b>	<b>\$102,718</b>	<b>\$364,872</b>	<b>\$4,354,074</b>	<b>\$293,240</b>	<b>\$222,324</b>	<b>\$875,075</b>	<b>\$119,592</b>	<b>Total Capital Costs</b>

# Ottoson Middle School

## SITE SYSTEMS

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule		Notes
						Year of action AND duration of project		
<b>SURFACE</b>								
Roadways and Parking	40,432 sf	10.00	\$404,320	25	20	1	in 1 Year	Asphalt-paved surface parking areas and roadways; cracking, depressions, and evidence of fatigue; costs to scarify and resurface
Crack-Fill and Sealcoat	40,432 sf	0.30	\$12,130	5+	5	6 /11 /16	in 1 Year	Asphalt pavement; future costs for preventative maintenance repairs in the form of crack filling, sealcoating, and restriping
Sidewalks (Asphalt)	sf							
Concrete Flatwork	8,521 ttl sf							Concrete walkways, steps, landings, etc.; conditions vary; recent repairs carried out; periodic sectional repair/replacement costs
Retaining Walls	1,704 sf	20.00	\$34,084	25	8	1 /9 /17	in 1 Year	Mix of stone, segmental concrete block masonry, and cast-in-place concrete retaining walls; periodic costs for sectional repairs/replacement
Guardrail	530 ttl lf							Metal railings at site steps/walkways; weathering/paint peeling
Fencing	1 ls	15000.00	\$15,000	25	40	1 /6 /11 /16	in 1 Year	Costs included with flatwork above
Dumpsters & Enclosures	1 ls							Metal chain-link fencing; serviceable condition
Play Equipment	ea							Periodic costs for sectional repairs/replacement
Site Lighting (Pole Fixtures)	6 ea	1250.00	\$7,500	10	15	5 /20	in 1 Year	Metal chain-link dumpster enclosure and concrete pad
Site Lighting (Bollards)	ea							Future enclosure replacement costs
Landscaping	1 ls	10000.00	\$10,000	varies	20	1 /6 /11 /16	in 1 Year	
Entry Signage	1 ea	3750.00	\$3,750	25	20	5	in 1 Year	
<b>SITE DISTRIBUTION SYSTEMS</b>								
Gas Lines	1 ls		\$0	varies	60			Utility supplied
Sanitary Lines	1 ls		\$0	varies	60			No problems evident or reported; Monitor
Cold Water Lines	1 ls		\$0	varies	60			Municipal sewerage system
Electric Distribution	1 ls		\$0	varies	60			No problems evident or reported; Monitor
Stormwater Drainage	1 ls	costs pending specifications	\$100,000	varies	60	1	in 1 Year	Municipal water supply
Irrigation System	1 ls	100000.00	\$100,000	varies	60			No problems evident or reported; Monitor
								Utility supplied
								No problems evident or reported; Monitor
								Stormwater drainage system reportedly problematic
								Costs for improvements pending detailed review by qualified professional
								Irrigation system serving abutting town-owned recreational area; reportedly town responsibility; no costs shown

# Projected Capital Needs Over Twenty Years

Ottoson Middle School

*Costs projected at 3%*

SITE SYSTEMS

Replacement Items	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041	
	<b>SURFACE</b>																				
Roadways and Parking	\$404,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Crack-Fill and Sealcoat	\$0	\$0	\$0	\$0	\$0	\$14,062	\$0	\$0	\$0	\$0	\$16,301	\$0	\$0	\$0	\$0	\$18,898	\$0	\$0	\$0	\$0	
Sidewalks (Asphalt)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Concrete Flatwork	\$34,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,177	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,695	\$0	\$0	\$0	
Retaining Walls	\$15,000	\$0	\$0	\$0	\$0	\$17,389	\$0	\$0	\$0	\$0	\$20,159	\$0	\$0	\$0	\$0	\$0	\$23,370	\$0	\$0	\$0	
Guardrail	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Fencing	\$0	\$9,418	\$0	\$0	\$0	\$0	\$10,918	\$0	\$0	\$0	\$0	\$12,657	\$0	\$0	\$0	\$0	\$14,673	\$0	\$0	\$0	
Dumpsters & Enclosures	\$0	\$0	\$0	\$0	\$5,346	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,329	
Play Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Site Lighting (Pole Fixtures)	\$0	\$0	\$0	\$0	\$8,441	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,151	
Site Lighting (Bollards)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Landscaping	\$10,000	\$0	\$0	\$0	\$0	\$11,593	\$0	\$0	\$0	\$0	\$13,439	\$0	\$0	\$0	\$0	\$0	\$15,580	\$0	\$0	\$0	
Entry Signage	\$0	\$0	\$0	\$0	\$4,221	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>SITE DISTRIBUTION SYSTEMS</b>																					
Gas Lines	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Sanitary Lines	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cold Water Lines	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Electric Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Stormwater Drainage	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Irrigation System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

# Ottoson Middle School

## MECHANICAL ROOM

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule		Notes
						Year of action AND duration of project		
<b>BOILERS</b>								
Boilers - Lochinvar	2 ea	60000.00	\$120,000	8	20	12	in 1 Year	Lochinvar natural gas-fired condensing boilers
		<i>costs per mgmt.</i>						Replacement costs including controls - 800 MBH energy input each
Boilers - Smith	1 ea	223050.00	\$223,050	25	25	5	in 1 Year	Smith cast iron sectional boiler; supplemental use; no problems/concerns reported; replacement costs - 2,974 MBH energy input
		<i>costs pending specifications</i>						Pneumatic control system governing interior environment conditions
Controls	1 ls	500000.00	\$500,000	25	20	1	in 1 Year	Reportedly inefficient/balancing issues; replacement costs with DDC
Air Compressor/Air Dryer	1 ea		\$0	25	25			Air compressor and dryer serving pneumatic control system
Variable Frequency Drives	2 ea	8500.00	\$17,000	8	20	12	in 1 Year	Costs included with system upgrade work above
Boiler Water Pumps	2 ea	1950.00	\$3,900	8	15	7	in 1 Year	Future replacement costs
Heating Water Pumps	2 ea	12500.00	\$25,000	8	20	12	in 1 Year	Grundfos micro-VFD boiler water circulation pumps
Chilled Water Pumps	ea							Future replacement costs
Flue Exhaust	1 ls		\$0	varies	25			Base-mounted hydronic heat circulation pumps
								Replacement costs - 20-horsepower rating each
<b>BOILER ROOM SYSTEMS</b>								
Boiler Room Piping/Valves	1 ls		\$0	varies	25			Boiler room piping/valves
3-Way Valve & Controller	ea							Costs included with boiler plant replacement above
Heat Exchanger for Bldg. Heat	ea							
Domestic Hot Water Generation	1 ea	11250.00	\$11,250	7	20	13	in 1 Year	Navien condensing domestic hot water boiler
Domestic Hot Water Storage	1 ea	6750.00	\$6,750	7	15	8	in 1 Year	Replacement costs - 150 MBH energy input
Domestic Hot Water Pumps	2 ea	1950.00	\$3,900	7	15	8	in 1 Year	HTP indirect-fired domestic hot water (DHW) storage tank
Boiler Room Piping Insulation	ls							Replacement costs - 80-gallon storage capacity
Fuel Oil Storage	1 ls		\$0	varies	25			Grundfos micro-VFD circulation pumps
Fuel Oil Transfer System	ls							Replacement costs
Sump Pumps	ea							

# Projected Capital Needs Over Twenty Years

Ottoson Middle School

*Costs projected at 3%*

MECHANICAL ROOM

Replacement Items	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041
	BOILERS																			
Boilers - Lochinvar	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$166,108	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boilers - Smith	\$0	\$0	\$0	\$0	\$251,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Controls	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Air Compressor/Air Dryer	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Variable Frequency Drives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,532	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boiler Water Pumps	\$0	\$0	\$0	\$0	\$0	\$0	\$4,657	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Heating Water Pumps	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,606	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Chilled Water Pumps	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Flue Exhaust	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BOILER ROOM SYSTEMS																				
Boiler Room Piping/Valves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3-Way Valve & Controller	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Heat Exchanger for Bldg. Heat	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Domestic Hot Water Generation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,040	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Domestic Hot Water Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,302	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Domestic Hot Water Pumps	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,797	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boiler Room Piping Insulation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fuel Oil Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fuel Oil Transfer System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sump Pumps	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# Ottoson Middle School

## BUILDING MECHANICAL AND ELECTRICAL

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
<b>BUILDING MECHANICAL</b>							
Compactors	ea						
Building Fire Suppression	1 ls		\$0	25	100		Wet fire suppression system equipped with backflow preventer Maintain and monitor
Distribution Piping Systems	1 ls		\$0	25+	50		No systemic problems/concerns reported Maintain and monitor
Packaged RTU's	1 ea	300000.00	\$300,000	25	20	1 in 1 Year	Packaged rooftop unit serving cafeteria Replacement costs - ~600 MBH gas heat, ~27.5-tons of cooling
Packaged RTU's	1 ea	300000.00	\$300,000	1	20	19 in 1 Year	Packaged rooftop units serving cafeteria
Packaged RTU's	2 ea	300000.00	\$600,000	4 to 5	20	16 in 1 Year	Replacement costs - ~600 MBH gas heat, ~27.5-tons of cooling
Packaged RTU's	cost per mgmt.						Packaged rooftop units serving media center (RTU-7, 8, 9)
Packaged RTU's	3 ea	20000.00	\$60,000	25	20	1 in 1 Year	Replacement costs - 40 MBH gas heat, ~2-tons of cooling
Packaged RTU's	3 ea	30000.00	\$90,000	1	20	19 in 1 Year	Packaged rooftop units serving classroom and media center (RTU-10)
Split-System A/C	3 ea	10000.00	\$30,000	25	15	1 /16 in 1 Year	Replacement costs - 70-120 MBH gas heat, ~3.5-7.5-tons of cooling
Ductless A/C	1 ea	10000.00	\$10,000	7	15	8 in 1 Year	Split-system air conditioners serving computer rooms (CU-1,2, 3)
Heating/Ventilation Units	2 ea	10000.00	\$20,000	11	15	4 /19 in 1 Year	Replacement costs - 3-tons of cooling capacity
Classroom Ventilators	costs pending specifications						Ductless mini-split system air conditioners serving various spaces
Ventilation & Exhaust	8 ea	40000.00	\$320,000	25	25	1 over 8 Years	Replacement costs
Ventilation & Exhaust	+/-	costs pending specifications					Interior heating and ventilation units equipped with heating coils
Classroom Ventilators	64 ea	10000.00	\$640,000	25	25	1 in 1 Year	Replacement costs
Ventilation & Exhaust	1 ls	7500.00	\$7,500	25	20	1 /6 /11 /16 over 5 Years	Ventilation units equipped with hydronic heating, pneumatic actuators
Ventilation & Exhaust							System replacement/upgrade costs; A/C units - Operating
Ventilation & Exhaust							Rooftop-mounted powered exhausters
Ventilation & Exhaust							Annual costs for as-needed replacement
<b>BUILDING ELECTRICAL</b>							
Building Power Wiring	1 ls	7500.00	\$7,500	25+	40	1 /6 /11 /16 in 1 Year	No systemic problems/concerns reported; periodic costs to carry out as-needed component replacement
Security System	1 ls	5000.00	\$5,000	2	5	3 /8 /13 /18 in 1 Year	Security camera system; recently upgraded; future costs for as-needed camera system and component repairs/replacement
Solar PV	326 ea		\$0	7	20		Solar photovoltaic panels and inverters; reportedly not development responsibility; no costs shown
Emergency Lights	1 ls		\$0	varies	10		Emergency battery-powered light fixtures
Smoke / Fire Detection	1 ls	340228.00	\$340,228	14	20	6 in 1 Year	Maintain and monitor - Operating
Public Address System/Clocks	costs pending specifications						Central fire alarm control panel monitoring hardwired end devices
Public Address System/Clocks	1 ls	50000.00	\$50,000	25	30	1 in 1 Year	Future replacement costs including end devices
Signaling / Communication	1 ls	4500.00	\$4,500	5	20	15 in 1 Year	Central system for paging/announcements/instructions
Signaling / Communication							50% of system not in operation including clocks; system upgrade/replacement costs
Signaling / Communication							Video entry intercom system at main entrance; no problems/concerns reported; replacement costs
<b>BUILDING ELEVATORS</b>							
Shafts and Doorways	2 ea		\$0	25	30		Hydraulic-type elevators; reportedly maintained under the terms of a full service contract
Elevator Cabs	2 ea	15000.00	\$30,000	1	15	14 in 1 Year	Elevator cab interiors
Controller/Dispatcher	2 ea		\$0	1	20		Costs for renovation efforts including door operator replacement
Controller/Dispatcher							Elevator controller/dispatcher equipment
Machine Room Equipment	2 ea		\$0	1	30		Maintained under the terms of a full service contract
Accessible Platform Lift	1 ea		\$0	1	25		Hydraulic-type elevators; reportedly maintained under the terms of a full service contract
Accessible Platform Lift							Vertical platform lift; recently replaced; no problems/concerns reported
Accessible Platform Lift							Maintain and monitor - Operating

# Projected Capital Needs Over Twenty Years

Ottoson Middle School

Replacement Items	Costs projected at 3%																			
	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041
<b>BUILDING MECHANICAL</b>																				
Compactors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building Fire Suppression	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Distribution Piping Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Packaged RTU's	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Packaged RTU's	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$934,780	\$0	\$0	\$510,730
Packaged RTU's	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Packaged RTU's	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153,219
Split-System A/C	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,739	\$0	\$0	\$0
Ductless A/C	\$0	\$0	\$0	\$21,855	\$0	\$0	\$0	\$12,299	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,049
Heating/Ventilation Units	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371	\$47,762	\$49,195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Classroom Ventilators	\$640,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ventilation & Exhaust	\$1,500	\$1,545	\$1,591	\$1,639	\$1,688	\$1,739	\$1,791	\$1,845	\$1,900	\$1,957	\$2,016	\$2,076	\$2,139	\$2,203	\$2,269	\$2,337	\$2,407	\$2,479	\$2,554	\$2,630
<b>BUILDING ELECTRICAL</b>																				
Building Power Wiring	\$7,500	\$0	\$0	\$0	\$0	\$8,695	\$0	\$0	\$0	\$10,079	\$0	\$0	\$0	\$0	\$11,685	\$0	\$0	\$0	\$0	\$0
Security System	\$0	\$0	\$5,305	\$0	\$0	\$0	\$0	\$6,149	\$0	\$0	\$0	\$0	\$7,129	\$0	\$0	\$0	\$0	\$8,264	\$0	\$0
Solar PV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Emergency Lights	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Smoke / Fire Detection	\$0	\$0	\$0	\$0	\$0	\$394,417	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Public Address System/Clocks	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Signaling / Communication	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,807	\$0	\$0	\$0	\$0	\$0
<b>BUILDING ELEVATORS</b>																				
Shafts and Doorways	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Elevator Cabs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,056	\$0	\$0	\$0	\$0	\$0	\$0
Controller/Dispatcher	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Machine Room Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Accessible Platform Lift	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# Ottoson Middle School

## BUILDING ARCHITECTURE

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule		Notes
						Year of action AND duration of project		
<strong>STRUCTURE</strong>								
Foundation	1,520 lf		\$0	25+	100			Cast-in-place concrete foundation walls; localized cracking and deteriorated cementitious parge coat; costs with masonry work below
Framing	1 ls	20000.00	\$20,000	25+	100	6	in 1 Year	Localized evidence of water infiltration within basement level
Elevated Walkway	220 sf	25.00	\$5,500	25	100	1	in 1 Year	Costs for as-needed repairs
<strong>BUILDING EXTERIOR</strong>								
Exterior Common Doors	19 ea	3750.00	\$71,250	25	35	10	in 1 Year	Fiberglass doors; predominantly at main entries; localized abrasions
Emergency Egress Doors	1 ea		\$0	<5	35			Future replacement costs; interim needs - Operating
	3 ttl							Single leaf fiberglass emergency egress doors
Emergency Egress Doors	1 ea	1750.00	\$1,750	varies	35	5	in 1 Year	Maintain and monitor - Operating
								Single leaf hollow metal emergency egress doors
Emergency Egress Doors	1 ea	3500.00	\$3,500	25	35	10	in 1 Year	Costs to replace doorway present at food receiving area
	9 ttl							Double leaf hollow metal emergency egress doors
Service Doors	2 ea	1750.00	\$3,500	25	35	1 /6 /11 /16	in 1 Year	Future replacement costs
								Single and double leaf hollow metal service doors
Overhead Door	1 ea	3750.00	\$3,750	25	30	5	in 1 Year	Costs for as-needed replacement
								Metal overhead door present at food receiving area
Automatic Door Operators	2 ea	2750.00	\$5,500	5	15	10	in 1 Year	Abrasions/wear; replacement costs
	72,960 ttl sf	<i>costs pending specifications</i>						Automatic door operators present at main entrance and vestibule
Exterior Walls - Masonry	10,944 sf	40.00	\$437,760	varies	60	1	in 1 Year	Replacement costs
								Brick and stone cladding; several areas of mortar loss, cracking, and deterioration (rear of original building); repair costs
Exterior Walls - Metal	2,235 sf		\$0	25+	40			Painted metal cladding along upper wall areas at original building
								Weathering/finish wear; refurbishment costs included w/ above
Exterior Caulking	9,865 lf	8.50	\$83,853	25	15	1	in 1 Year	Caulking installed at window and door perimeters, control joints
								Cohesive/adhesive failures; replacement costs; future with windows
Steel Lintels	1 ls		\$0	25	20			Steel lintels; corrosion and paint peeling noted
								Refurbishment costs included with Exterior Walls above
Exterior Ceilings	3,105 sf		\$0	25	30			Soffit siding at north end of building; serviceable condition
	12,709 ttl sf							Maintain and monitor - Operating
Window Frames	1,906 sf	25.00	\$47,660	25	35	1	over 15 Years	Prefinished aluminum-framed fixed and operable windows
		<i>costs pending specifications</i>						Costs for as-needed replacement of failed and cracked IGU's
Window Frames	12,709 sf	150.00	\$1,906,380	25	35	16	in 1 Year	Prefinished aluminum-framed fixed and operable windows
								Future replacement costs
Storm / Screen Windows	ea							Canopy structures; pronounced vegetation growth and poor drainage
Canopies	1 ls		\$0	25	25			noted from available vantage points; costs included with roof below
								Fixtures for site/security/entry area illumination
Building Mounted Lighting	1 ls	7500.00	\$7,500	varies	15	11	in 1 Year	Most have been retrofitted with LEDs; Replace fixtures in future

# Projected Capital Needs Over Twenty Years

Ottoson Middle School

*Costs projected at 3%*

BUILDING ARCHITECTURE

Replacement Items	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041
	<b>STRUCTURE</b>																			
Foundation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Framing	\$0	\$0	\$0	\$0	\$0	\$23,185	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Elevated Walkway	\$5,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>BUILDING EXTERIOR</b>																				
Exterior Common Doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$92,965	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Emergency Egress Doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Emergency Egress Doors	\$0	\$0	\$0	\$0	\$1,970	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Emergency Egress Doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,567	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Service Doors	\$3,500	\$0	\$0	\$0	\$0	\$4,057	\$0	\$0	\$0	\$0	\$4,704	\$0	\$0	\$0	\$0	\$5,453	\$0	\$0	\$0	\$0
Overhead Door	\$0	\$0	\$0	\$0	\$4,221	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Automatic Door Operators	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,176	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Walls - Masonry	\$437,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Walls - Metal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Caulking	\$83,853	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Steel Lintels	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Window Frames	\$3,177	\$3,273	\$3,371	\$3,472	\$3,576	\$3,683	\$3,794	\$3,908	\$4,025	\$4,146	\$4,270	\$4,398	\$4,530	\$4,666	\$4,806	\$0	\$0	\$0	\$0	\$0
Window Frames	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	#####	\$0	\$0	\$0	\$0
Storm / Screen Windows	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Canopies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building Mounted Lighting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,079	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# Ottoson Middle School

## BUILDING ARCHITECTURE--continued

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
<b>ROOF SYSTEMS</b>							
Structure	83,425 sf	<u>cost per mgmt.</u>	\$0	25+	40		Flat roof structure; several areas of water ponding noted
Roof Covering	83,425 sf	30.00	\$2,502,750	25	20	1 in 1 Year	Costs to address water ponding included with roof work below
Roof Covering	100 sf		\$0	25	40		Mechanically fastened EPDM roof assembly; reportedly dates to rehabilitation; limited replacement to date; replacement costs
Roof Drainage	1 ls		\$0	25	20		Limited standing seam metal roofs; good overall conditions
Skylights	ea						Maintain and monitor - Operating
Penthouses	ea						Internal roof drains; several areas of water ponding, isolated displaced strainer domes; costs included with roof replacement work above
Access Doors & Hatches	1 ls	7500.00	\$7,500	varies	35	5 in 1 Year	
Chimneys	1 ls		\$0	40+	40		
<b>HALLS</b>							
Hallway Walls	76,485 sf	1.00	\$76,485	varies	5	1 /6 /11 /16 over 3 Years	Painted wall surfaces; periodic costs to carry out as-needed repainting efforts
Hallway Ceilings	25,045 sf	<u>cost per mgmt.</u>	\$137,748	25	40	15 over 5 Years	Suspended ceiling tile; serviceable condition
Hallway Floors	25,045 sf	5.50	\$250,450	25	20	1 over 5 Years	Future replacement costs
Hallway Doors	1 ls	10000.00	\$10,000	25	35	1 /6 /11 /16 in 1 Year	Vinyl composition tile (VCT) flooring; localized cracking/wear
Hallway Railings	lf						Replacement costs
Hallway Interior Lighting	1 ls		\$0	varies	20		Predominantly solid core wood passage doors; localized damage/wear
							Costs for as-needed replacement of passage doors
<b>STAIRS</b>							
Stair Walls and Ceilings	5,562 sf	5.50	\$30,591	25	40	15 in 1 Year	Suspended ceiling tile; future replacement costs
Stair Floors	18,035 sf	<u>cost per mgmt.</u>	\$18,035	varies	5	1 /6 /11 /16 in 1 Year	Painted wall surfaces; costs for repainting efforts
Stair Floors	5,562 ttl sf	1.00					Rubber flooring; localized wear
Stair Doors	1,391 sf	20.00	\$27,810	25	30	1 /6 /11 /16 in 1 Year	Costs for as-needed replacement
Stair Railings	1 ls		\$0	25	35		Stairway fire doors
							Maintain and monitor - Operating
							Stairway railings
							Maintain and monitor - Operating

# Projected Capital Needs Over Twenty Years

## Ottoson Middle School

*Costs projected at 3%*

### BUILDING ARCHITECTURE--continued

Replacement Items	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041	
	<b>ROOF SYSTEMS</b>																				
Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Roof Covering	#####	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Roof Covering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Roof Drainage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Skylights	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Penthouses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Access Doors & Hatches	\$0	\$0	\$0	\$0	\$8,441	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Chimneys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>HALLS</b>																					
Hallway Walls	\$25,495	\$26,260	\$27,048	\$0	\$0	\$29,556	\$30,442	\$31,356	\$0	\$0	\$34,263	\$35,291	\$36,350	\$0	\$0	\$39,720	\$40,912	\$42,139	\$0	\$0	
Hallway Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,671	\$42,921	\$44,209	\$45,535	\$46,901	
Hallway Floors	\$50,090	\$51,593	\$53,140	\$54,735	\$56,377	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Hallway Doors	\$10,000	\$0	\$0	\$0	\$0	\$0	\$11,593	\$0	\$0	\$0	\$13,439	\$0	\$0	\$0	\$0	\$15,580	\$0	\$0	\$0	\$0	
Hallway Railings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Hallway Interior Lighting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>STAIRS</b>																					
Stair Walls and Ceilings	\$18,035	\$0	\$0	\$0	\$0	\$20,908	\$0	\$0	\$0	\$0	\$24,238	\$0	\$0	\$0	\$46,272	\$28,098	\$0	\$0	\$0	\$0	
Stair Floors	\$27,810	\$0	\$0	\$0	\$0	\$32,239	\$0	\$0	\$0	\$0	\$37,374	\$0	\$0	\$0	\$0	\$43,327	\$0	\$0	\$0	\$0	
Stair Doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Stair Railings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

# Ottoson Middle School

## BUILDING ARCHITECTURE--continued

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
<b>LOBBIES/MAIL FACILITIES</b>							
Lobby Walls & Ceilings	2,652 sf <u>7,350 sf</u>	4.50 <u>1.00</u> <i>cost per mgmt.</i>	\$11,934 <u>\$7,350</u>	25 <u>varies</u>	40 <u>5</u>	15 <u>1 /6 /11 /16</u>	in 1 Year <u>in 1 Year</u>
Lobby Floors	2,652 sf	10.00	\$26,520	25	20	1	in 1 Year
<b>CLASSROOMS/LIBRARY</b>							
Classroom Ceilings	64,954 sf	5.50	\$357,247	25	40	15	over 10 Years
Classroom Walls	87,270 sf	1.00	\$87,270	varies	10	1 /11	over 10 Years
Classroom Floors	56,587 sf	10.00	\$565,870	25	20	1	over 10 Years
Library Floors	8,367 sf	4.50	\$37,652	10	10	3 /13	in 1 Year
Classroom Cabinetry	1 ls	5000.00	\$5,000	varies	5	1 /6 /11 /16	in 1 Year
Classroom Miscellaneous	1 ls	50000.00	\$50,000	varies	5	1 /6 /11 /16	over 5 Years
<b>OFFICE/ADMINISTRATION</b>							
Office Ceilings	9,103 sf	5.50	\$50,067	25	40	15	over 5 Years
Office Walls	19,200 sf	1.00	\$19,200	varies	10	1 /11	over 5 Years
Office Floor Covering	6,374 sf	10.00	\$63,740	25	20	1	over 5 Years
Office Floor Covering	2,729 sf	4.50	\$12,281	varies	10	5 /15	in 1 Year
Office Equipment	1 ls		\$0	varies	8		
<b>GYMNASIUMS</b>							
Gymnasium Ceilings	11,519 sf <u>9,131 sf</u>	<i>costs pending specifications</i> <u>15.00</u>	\$136,965 <u>\$136,965</u>	40+ <u>40+</u>	40 <u>40</u>	1	in 1 Year
Gymnasium Walls	25,230 sf	1.50	\$37,845	10+	10	1 /11	in 1 Year
Gymnasium Floors	9,131 sf	20.00	\$182,620	~15	20	5	in 1 Year
Gymnasium Floors	9,712 sf	4.50	\$43,704	25	10	1 /11	in 1 Year
Gymnasium Stage	1,807 sf	7.50	\$13,553	25	20	1	in 1 Year
Gymnasium/Stage Equipment	1 ls	10000.00	\$10,000	varies	5	1 /6 /11 /16	in 1 Year

# Projected Capital Needs Over Twenty Years

## Ottoson Middle School

Costs projected at 3%

### BUILDING ARCHITECTURE--continued

Replacement Items	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041	
	<b>LOBBIES/MAIL FACILITIES</b>																				
Lobby Walls & Ceilings	\$7,350	\$0	\$0	\$0	\$0	\$8,521	\$0	\$0	\$0	\$0	\$9,878	\$0	\$0	\$0	\$18,051	\$11,451	\$0	\$0	\$0	\$0	
Lobby Floors	\$26,520	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>CLASSROOMS/LIBRARY</b>																					
Classroom Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,037	\$55,658	\$57,328	\$59,047	\$60,819	\$62,643	
Classroom Walls	\$8,727	\$8,989	\$9,258	\$9,536	\$9,822	\$10,117	\$10,420	\$10,733	\$11,055	\$11,387	\$11,728	\$12,080	\$12,443	\$12,816	\$13,200	\$13,596	\$14,004	\$14,424	\$14,857	\$15,303	
Classroom Floors	\$56,587	\$58,285	\$60,033	\$61,834	\$63,689	\$65,600	\$67,568	\$69,595	\$71,683	\$73,833	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Library Floors	\$0	\$0	\$39,944	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,682	\$0	\$0	\$0	\$0	\$0	
Classroom Cabinetry	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,796	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,790	\$0	\$0	\$0	
Classroom Miscellaneous	\$10,000	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	\$13,048	\$13,439	\$13,842	\$14,258	\$14,685	\$15,126	\$15,580	\$16,047	\$16,528	\$17,024	\$17,535	
<b>OFFICE/ADMINISTRATION</b>																					
Office Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,146	\$15,600	\$16,068	\$16,550	\$17,047	\$0
Office Walls	\$3,840	\$3,955	\$4,074	\$4,196	\$4,322	\$0	\$0	\$0	\$0	\$0	\$5,161	\$5,315	\$5,475	\$5,639	\$5,808	\$0	\$0	\$0	\$0	\$0	\$0
Office Floor Covering	\$12,748	\$13,130	\$13,524	\$13,930	\$14,348	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Office Floor Covering	\$0	\$0	\$0	\$0	\$0	\$13,822	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,575	\$0	\$0	\$0	\$0	
Office Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>GYMNASIUMS</b>																					
Gymnasium Ceilings	\$136,965	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Gymnasium Walls	\$37,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Gymnasium Floors	\$0	\$0	\$0	\$0	\$205,540	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Gymnasium Floors	\$43,704	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,735	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Gymnasium Stage	\$13,553	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Gymnasium/Stage Equipment	\$10,000	\$0	\$0	\$0	\$0	\$0	\$11,593	\$0	\$0	\$0	\$13,439	\$0	\$0	\$0	\$0	\$15,580	\$0	\$0	\$0	\$0	

# Ottoson Middle School

## BUILDING ARCHITECTURE--continued

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2022 \$\$	Total Cost in 2022 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
<b>CAFETERIA</b>							
Cafeteria Ceilings	7,800 sf	5.50	\$42,900	25	40	15 in 1 Year	Suspended ceiling tile; several moisture stained ceiling tiles
Cafeteria Walls	9,000 sf	1.00	\$9,000	varies	10	1 /11 in 1 Year	Future replacement costs; interim needs - Operating
		cost per mgmt.					Painted wall surfaces
Cafeteria Floors	7,800 sf	10.00	\$78,000	25	20	1 in 1 Year	Costs for repainting efforts
Cafeteria Equipment	1 ls	10000.00	\$10,000	varies	5	2 /7 /12 /17 in 1 Year	Vinyl composition tile (VCT)
Walk-In Freezer Compressor	1 ea	2500.00	\$2,500	~7	10	3 /13 in 1 Year	Commercial-grade kitchen equipment
							Periodic costs for as-needed equipment replacement
							Walk-in freezer compressor unit
							Replacement costs
<b>LOCKER ROOMS</b>							
Locker Room Ceilings	2,942 sf	1.00	\$2,942	10+	10	1 11 in 1 Year	Painted ceiling surfaces within girl's locker room; costs
	2,281 sf	5.50	\$12,546	25	40	15 in 1 Year	Suspended ceiling tile within boy's locker room; costs
	8,025 ttl sf						Painted wall surfaces and exposed masonry
Locker Room Walls	4,013 sf	1.00	\$4,013	varies	10	1 /11 in 1 Year	Costs for as-needed repainting efforts
Locker Room Floors	5,223 sf	3.50	\$18,281	25	10	1 /11 in 1 Year	Epoxy flooring; age related wear
Locker Room Fixtures	1 ls	2500.00	\$2,500	5+	5	1 /6 /11 /16 in 1 Year	Refurbishment costs
Locker Room Equipment	1 ls	7500.00	\$7,500	25+	25	1 /11 in 1 Year	Shower stalls, toilets, lavatories; limited use
							Costs for as-needed fixture replacement
							Metal lockers, partitions, and equipment; age related wear
							Costs for as-needed repainting/refurbishment efforts
<b>RESTROOMS</b>							
Restroom Ceilings	2,407 sf	5.50	\$13,239	25	40	15 in 1 Year	Suspended ceiling tile; serviceable condition
Restroom Walls	7,340 sf	1.50	\$11,010	varies	10	1 /11 over 5 Years	Future replacement costs
Restroom Floors	1,926 sf	3.50	\$6,740	10+	10	1 /11 in 1 Year	Painted wall surfaces; limited ceramic tile walls
		cost per mgmt.					Costs for as-needed repainting/refurbishment efforts
Restroom Floors	481 sf	10.00	\$4,814	25	20	1 in 1 Year	Predominantly epoxy flooring; age related wear
Restroom Fixtures	19 ea	7500.00	\$142,500	varies	20+	1 over 19 Years	Refurbishment costs
Restroom Accessories	19 ea	3000.00	\$57,000	varies	20+	1 over 19 Years	Vinyl composition tile (VCT) flooring; age related wear
							Replacement costs
							Lavatories, toilets, urinals, etc.
							Costs for as-needed replacement
							Restroom partitions, toilet paper holders, mirrors, soap dispensers, etc.
							Costs for as-needed replacement

# Projected Capital Needs Over Twenty Years

## Ottoson Middle School

*Costs projected at 3%*

### BUILDING ARCHITECTURE--continued

Replacement Items	Year 1 2022	Year 2 2023	Year 3 2024	Year 4 2025	Year 5 2026	Year 6 2027	Year 7 2028	Year 8 2029	Year 9 2030	Year 10 2031	Year 11 2032	Year 12 2033	Year 13 2034	Year 14 2035	Year 15 2036	Year 16 2037	Year 17 2038	Year 18 2039	Year 19 2040	Year 20 2041
	<b>CAFETERIA</b>																			
Cafeteria Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64,890	\$0	\$0	\$0	\$0	\$0
Cafeteria Walls	\$9,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,095	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cafeteria Floors	\$78,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cafeteria Equipment	\$0	\$10,300	\$0	\$0	\$0	\$0	\$11,941	\$0	\$0	\$0	\$13,842	\$0	\$0	\$0	\$0	\$16,047	\$0	\$0	\$0	\$0
Walk-In Freezer Compressor	\$0	\$0	\$2,652	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>LOCKER ROOMS</b>																				
Locker Room Ceilings	\$2,942	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,954	\$0	\$0	\$0	\$18,976	\$0	\$0	\$0	\$0	\$0
Locker Room Walls	\$4,013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,392	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Locker Room Floors	\$18,281	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,567	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Locker Room Fixtures	\$2,500	\$0	\$0	\$0	\$0	\$2,898	\$0	\$0	\$0	\$0	\$3,360	\$0	\$0	\$0	\$0	\$3,895	\$0	\$0	\$0	\$0
Locker Room Equipment	\$7,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,079	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>RESTROOMS</b>																				
Restroom Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,024	\$0	\$0	\$0	\$0	\$0
Restroom Walls	\$2,202	\$2,268	\$2,336	\$2,406	\$2,478	\$0	\$0	\$0	\$0	\$0	\$2,959	\$3,048	\$3,140	\$3,234	\$3,331	\$0	\$0	\$0	\$0	\$0
Restroom Floors	\$6,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,057	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Restroom Floors	\$4,814	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Restroom Fixtures	\$7,500	\$7,725	\$7,957	\$8,195	\$8,441	\$8,695	\$8,955	\$9,224	\$9,501	\$9,786	\$10,079	\$10,382	\$10,693	\$11,014	\$11,344	\$11,685	\$12,035	\$12,396	\$12,768	\$0
Restroom Accessories	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478	\$3,582	\$3,690	\$3,800	\$3,914	\$4,032	\$4,153	\$4,277	\$4,406	\$4,538	\$4,674	\$4,814	\$4,959	\$5,107	\$0

## **Appendix A: Statement of Delivery**

Our Capital Needs Assessment (the "CNA" or the "Report") on the subject property is delivered subject to the following terms and conditions:

1. The report and analysis may be relied upon by you as a description of the observed current conditions of the building and site improvements, only as of the date of this report, and with the knowledge that certain limitations and exceptions within the report that are the reflective of the scope of services as defined in our contract. Although care has been taken in the performance of this assessment, ON-SITE INSIGHT, Inc. (and/or its representatives) makes no representations regarding latent or concealed defects that may exist and no warranty or guarantee is expressed or implied. This report is made only in the best exercise of our ability and judgment. Conclusions reached in this report assume current and continuing responsible ownership and competent property management.
2. We have undertaken no formal evaluation of environmental concerns, including but not limited to asbestos containing materials (ACMs), lead-based paint, chlorofluorocarbons (CFCs), polychlorinated biphenyls (PCBs), and mildew/mold.
3. Conclusions in this report are based on estimates of the age and normal working life of various items of equipment and/or statistical comparisons. Actual conditions can alter the useful life of any item. When an item needs immediate replacement depends on many factors, including previous use/misuse, irregularity of servicing, faulty manufacture, unfavorable conditions, Acts of God and unforeseen circumstances. Certain components that may be working when we made our inspection might deteriorate or break in the future without notice.
4. To prepare this report, we used historic data on capital activities and costs, blueprints (when available), and current prices for capital actions. We have not independently verified this information, have assumed that it is reliable, but assume no responsibility for its accuracy.
5. Unless otherwise noted in the report, we assume that all building components meet code requirements in force when the property was built.
6. If accessibility issues are referenced in the report, the site elements, common areas, and dwelling units at the development were examined for compliance with the requirements of the Uniform Federal Accessibility Standards (UFAS), and for Massachusetts properties, the Massachusetts Architectural Accessibility Board (AAB). The methodology employed in undertaking this examination is adapted from a Technical Assistance Guide (TAG-88-11) titled "Supplemental Information About the Section 504 Transition Plan Requirements" published by the Coordination and Review section of the U.S. Department of Justice Civil Rights Division, and the AAB Rules and Regulations, 521 CMR effective July 10, 1987. The Guide also incorporates the requirements of UFAS, published April 1, 1988 by the General Services Administration, the Department of Defense, the Department of Housing and Urban Development, and the U.S. Postal Service. Changes in legislation and/or regulations may make some observations moot.
7. Response Actions and estimated costs of responses were developed by ON-SITE INSIGHT, Inc. If additional structural work is necessary, costs for some Response Actions may exceed estimates. Whenever the Response Action is to remove, reposition, or modify walls, a competent structural engineer should be retained before any work is done, because such investigation may disclose that a Response Action is either more costly than estimated, or is not possible.
8. Conclusions reached in this report assume current and continuing responsible ownership and competent property management. Any unauthorized reliance on or use of the report, including any of its information or conclusions, will be at the third party's sole risk. For the same reasons, no warranties or representation, express or implied in this report, are made to any such third party. Reliance on the report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the contract Terms and Conditions. The limitation of liability defined in the Terms and Conditions is the aggregate limit of ON-SITE INSIGHT's liability to the client and all relying parties.
9. Regular updates of this plan are recommended to ensure careful monitoring of major building systems and to adjust the program to accommodate unanticipated circumstances surrounding the buildings, operations, and/or occupants.



# Ottoson Middle School

Statement of Interest 2025

Dr. Elizabeth Homan, Superintendent

# Agenda

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SOI Priorities

Major Building Concerns for SOI Proposal

SOI and MSBA Process

Vote to Authorize Submission



# SOI Priorities

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The Massachusetts School Building Authority provides 8 priorities from which districts can choose in their online portal. We have chosen the following two priorities as the reasons why we are requesting funding to rebuild Ottoson Middle School:

- (5) Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
- (7) Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.

While an argument could be made for (6) short term enrollment growth, by the time the school is online, enrollments will likely be flat or declining, so we are not recommending enrollment as a priority for this submission.

# Major Building Concerns: HVAC

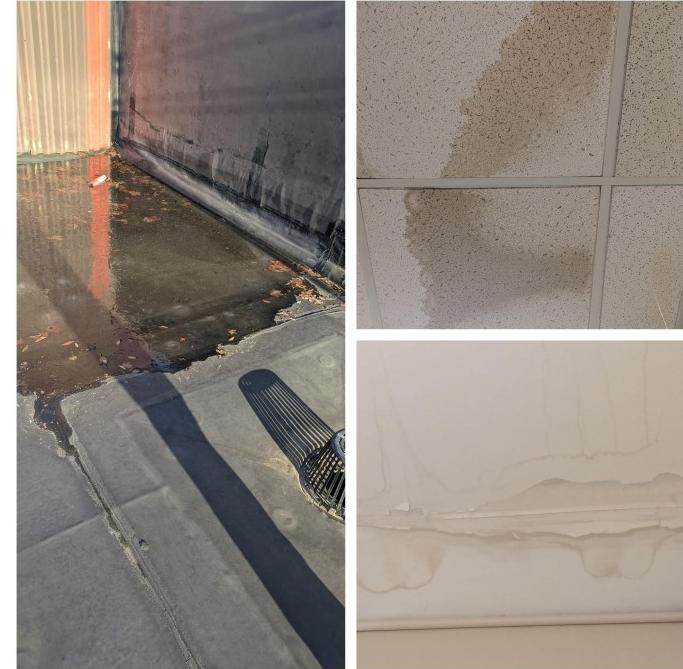


- 2022 Capital Needs Assessment highlighted the immediate need for \$500,000 in boiler repairs, and an additional \$300,000 in repairs by 2027, along with additional millions in other HVAC updates.
- Heating and cooling is inconsistent throughout the building; broken sensors in the pneumatic control system trip valves to “always open/closed” in some areas of the building, and boilers inconsistently work in other areas of the building.
- Cooling systems in the central portion of the building create condensation in the summer, which has resulted in water damage and the need for mold monitoring and remediation in the summer.
- None of these systems are energy efficient or sustainable, slowing Arlington’s progress towards its sustainability goals.

# Major Building Concerns: Roof Leaks and Design



- Pooling and snow/ice melt on OMS's flat roof causes water damage inside the building throughout the seasons.
- Vendors have conducted frequent repairs over the past several years.
- Water damage can be seen on ceiling tiles as a result of roof flooding, as well as in spaces where cooling systems have caused excessive condensation when the vents come into contact with humid summer air.
- APS has needed to replace furniture and fixtures when water damage has occurred in classrooms over the past four years, displacing students and disrupting learning.
- APS has remediated mold damage several times in OMS, and while no air quality studies have indicated health concerns, the continual need to remediate mold and conduct studies takes valuable resources from other priorities.



# Major Building Concerns: Accessibility



Arlington Public Schools  
Education That Empowers

- Many areas of the building present accessibility issues for anyone with mobility or vision challenges, such as:
  - Frequent steps up/down in the cafeteria;
  - Long ramps to access common instructional areas, such as the gym or cafeteria main seating areas;
  - Light switches located at one or the other (but not both) ends of accessible entrances; and
  - Multiple wings and mezzanines separated by staircases.
- Building design necessitates the isolation of small group learning spaces and program areas, making them less integrated with core programming and therefore significantly less inclusive.



*Cumbersome and difficult-to-find ramp to Wood Gym does not include lighting at the top of the ramp.*

# Major Building Concerns: Exterior Envelope Deterioration



Arlington Public Schools  
Education That Empowers

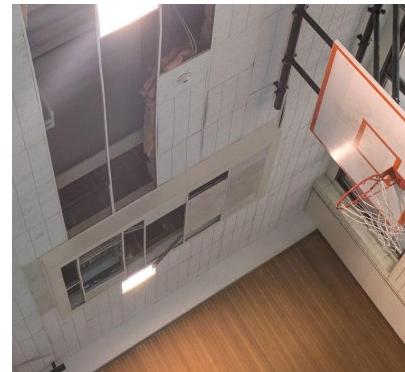
- Several areas of mortar loss, cracking, deterioration, with exposed and corroded reinforcing steel observed within the brick and stone cladding;
- Displaced suspended ceiling tiles in the gyms require either constant remediation or replacement of the ceiling;
- Cohesive/adhesive failures in exterior caulking; and
- Many areas require maintenance or replacement of floor tiles, ceilings, fixtures, exterior doors, or other major fixtures, totalling \$3.6M in year 1 and at least \$200,000/year according to 2022 Capital Needs Assessment



View of double leaf hollow metal service doors exhibiting age related wear/weathering



View of localized deteriorated brick masonry units at window corner



View of pronounced stone cladding deterioration as seen at north facing elevation of original building—also note exposed and corroded reinforcing steel

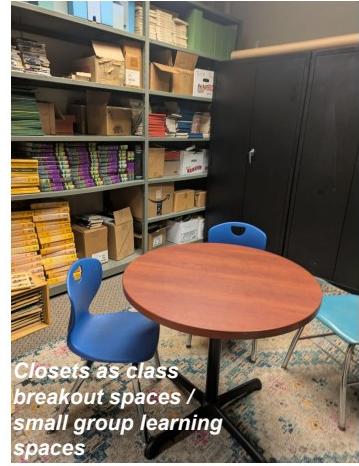
# Major Building Concerns: Layout, Fixtures, and Programming



- Awkward layout does not provide common areas for collaborative learning, breakout spaces, or varied class sizes for different learning purposes;
- Several spaces have been retrofitted for new uses, with multiple science classrooms lacking lab sinks and other science furnishings, fixtures, and equipment, and some makeshift office spaces lacking appropriate ventilation;
- Lack of common areas do not foster teacher collaboration, interdisciplinary learning, or inclusion, all key components of the APS Strategic Plan and OMS School Plan; specialized programs are secluded from core classrooms and common area square footage is not utilized efficiently.



*Science Fixtures seen above are only in some science classrooms*



*Closets as class breakout spaces / small group learning spaces*



# SOI and MSBA Process

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- School Committee authorizes Superintendent to Submit;
- Present and discuss with Select Board, authorization vote for Superintendent to Submit;
- Complete final touches on application with support from facilities, operations, sustainability, and OMS leadership;
- Submission Deadline: Friday, April 11th
- Consideration for Eligibility by MSBA:
  - Senior Study Visits (if Necessary): August through October
  - Invitation into Eligibility Period: after completion of senior study visits (varies based on number conducted by MSBA)

Should OMS be invited into the eligibility period, we have 270 days to complete several steps in order to progress to an invitation to engage in a feasibility study. This would require APS to secure funding for the feasibility study during the 270 days.

# Vote to Authorize Submission

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Resolved: Having convened in an open meeting on ***Monday, April 7th, 2025***, prior to the SOI submission closing date, the ***Select Board of the Town of Arlington***, in accordance with its charter, by-laws, and ordinances, has voted to authorize the ***Superintendent of Schools, Dr. Elizabeth Homan***, to submit to the Massachusetts School Building Authority the Statement of Interest Form dated April 2025 ***for the Ottoson Middle School located at 63 Acton Street, Arlington, MA 02476*** which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future: replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements; and replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility; and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the Arlington Public Schools to filing an application for funding with the Massachusetts School Building Authority.

April 7, 2025

**Arlington School Committee  
MASSACHUSETTS 02476-4908**

Resolved: Having convened in an open meeting on **Monday, April 7th, 2025**, prior to the SOI submission closing date, the **Select Board of the Town of Arlington**, in accordance with its charter, by-laws, and ordinances, has voted to authorize the **Superintendent of Schools, Dr. Elizabeth Homan**, to submit to the Massachusetts School Building Authority the Statement of Interest Form dated April 2025 for the **Ottoson Middle School located at 63 Acton Street, Arlington, MA 02476** which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future: replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements; and replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility; and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the Arlington Public Schools to filing an application for funding with the Massachusetts School Building Authority.

Sincerely,

Stephen DeCoursey

Chair, Arlington Select Board

<b>Stephen DeCoursey</b>	
<b>Diane M. Mahon</b>	
<b>Lenard Diggins</b>	
<b>Eric D. Helmuth</b>	
<b>John V. Hurd</b>	
<b>Vote Result</b>	

A true record ATTEST:

By: \_\_\_\_\_ Town Clerk



**Town of Arlington, Massachusetts**

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**5:55 p.m. Adjournment (J. Morgan)**



## Town of Arlington, Massachusetts

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**Submitted by Jane Morgan, Chair**